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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,722	11/01/2000	Shigeyuki Sudo	58799-029	9518

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Washington, DC 20005-3096

EXAMINER
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BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2668

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/702,722

Applicant(s)

SUDO ET AL.

Examiner

Steven Blount

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 14, 16 - 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 - 11 is/are allowed.
- 6) ☒ Claim(s) 12 - 14, 16 - 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

A. Claim 21 is objected to. In line 7, the phrase "a controller which controls the receiver so as to acquire a pilot signal and the transmitter." This is grammatically incorrect, since the receiver does not "acquire the transmitter."

### ***Claim Rejections - 35 USC § 103***

1. Claims 12, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (hereinafter AAPA) in view of U.S. patent 5,507,039 to Honma.

With regard to each of these claims, AAPA teaches a CDMA communication system wherein mobile units despread signals (p1, 2<sup>nd</sup> paragraph) sent to them from a base station, and also acquire pilot signals (page 2, lines 1+). AAPA, beginning on page 3, lines 1+, also discusses the problem associated with having registration done repeatedly putting a drain on the battery and increasing network traffic. AAPA does not, however, teach turning off the receiver after repeated registration attempts. The process of turning off a receiver after a repeated number of attempts is taught in Honma. See col 6 lines 1 – 11.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have turned off the receiver of AAPA after repeated registration attempts, in light of the teachings of Honma, in order to conserve battery power, and to further prevent unnecessary network traffic (by switching to the new channel instead of fruitlessly attempting to connect to the old channel after timeout).

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2. Claims 13 – 14 and 17 – 18 and 22 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (AAPA) in view of U.S. patent 5,507,039 to Honma as applied above to claims 12, 16, and 21, and further in view of U.S. patent 5,574,973 to Borth et al.

AAPA/Honma teach the invention as described above, but do not teach performing registration when the signal level is higher or equal to or less than a threshold. Registration after signal quality determination is taught in Borth et al. See col 6 lines 30 – 50. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided threshold levels for the signal level received in the receiver in AAPA/Honma in light of the teachings of Borth in order to provide a further means for conserving battery power.

3. Claims 19 – 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (hereinafter AAPA) in view of U.S. patent 5,507,039 to Honma as applied above to claims 12, 16, and 21, and further in view of U.S. patent 5,450,613 to Takahara et al.

AAPA/Honma teach the invention as described above, but do not teach the use of an “of service area” indicator. This is taught in Takahara et al. See the last sentence of the abstract and also col 13 lines 35+. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided AAPA/Honma with an “out of service area indicator” in light of the teachings of Takahara et al in order that a user may be made aware of when the handset is out of the coverage area.

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4. Claims 12, 16, and 21 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,061,564 to Akeda in view of U.S. patent 5,914,214 to Reece and U.S. patent 6,229,843 to Lomp et al.

With regard to claim 12, Akeda teaches a receiver that receives a paging channel (col 7 lines 62+) and after failing in registration (col 8 lines 17+) for a predetermined period of time (col 8 lines 30+), a signal is sent to shut off the power supply (col 8 lines 43+). This process is also discussed in detail in col 10 lines 5 through 35, and in a second embodiment in col 11, lines 10 – 30.

Akeda does not, however, teach the system to operate in a CDMA environment, through the use of a CDMA modem, or that the system turns off the receiver after registration operations are performed *a predetermined number of times*.

Reece teaches the equivalency of using a counter and a timer (to contact a control channel). See col 16 lines 21+. Reece also teaches that this process can occur in a CDMA environment. See col 8 lines 40+.

While Reece does, as previously noted, teach the environment to be possibly be one of CDMA, Reece does not explicitly teach the use of a CDMA *modem* (though frankly this it is well known to those of ordinary skill in the art that such systems operate through the use of a modem).

Lomp et al teaches that the CDMA process can occur in a *CDMA modem*. See Col 3 lines 20+ and the abstract.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have counted the number of registration attempts in a CDMA environment

in Akeda in light of the teachings of Reece, and to have further used a CDMA modem in Akeda/Reece, in light of the teachings of Lomp et al, in order to save battery power when attempting to register with a base station in a CDMA environment.

5. Claims 13 – 14, 17 – 18, and 22 – 23 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,061,564 to Akeda in view of U.S. patent 5,914,214 to Reece and U.S. patent 6,229,843 to Lomp et al as applied above to claims 12, 16, and 21, and further in view of U.S. patent 5,574,973 to Borth et al.

Akeda/Reece and Lomp teach the invention as described above with respect to claim 21, but do not teach performing registration when the signal level is higher or equal to or less than a threshold. This is taught in Borth, as discussed above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided threshold levels for the signal level received in the receiver in Akeda/Reece/Lomp in light of the teachings of Borth in order to provide a further means for conserving battery power.

6. Claims 19 – 20 and 24 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,061,564 to Akeda in view of U.S. patent 5,914,214 to Reece and U.S. patent 6,229,843 to Lomp et al as applied above to claims 12, 16, and 21, and further in view of U.S. patent 5,450,613 to Takahara et al.

Akeda/Reece/Lomp teach the invention as described above, but do not teach the use of an "of of service area" indicator. This is taught in Takahara et al. See the last sentence of the abstract and also col 13 lines 35+. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided

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Akeda/Reece/Lomp/Takahara et al with an "out of service area indicator" in light of the teachings of Takahara et al in order that a user may be made aware of when the handset is out of the coverage area.

7. Claims 1 – 11 are currently allowable over the prior art of record.

***Response to Arguments***

8. Most of applicants remarks are moot in view of the new grounds of rejection. The examiner disagrees with the applicants remark that "There is nothing in the AAPA that this particular type of battery consumption is a particular problem recognized by others of skill in the art as a problem needing to be solved" (page 9, lines 15+).

In the specification, on page 3 (in the "Description of the related art section") it is stated that "since the registration involves transmission, if registration is frequently done, then traffic on the network increases. Also, the battery power in the mobile station is consumed. Accordingly, the registration needs to be carried out minimally."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

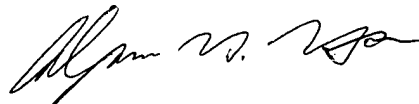
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB



1/17/06



ALPUS H. HSU  
PRIMARY EXAMINER